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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,769	07/17/2003	John Richard Boylan	06256P USA	1707

23543 7590 04/20/2006

AIR PRODUCTS AND CHEMICALS, INC.
PATENT DEPARTMENT
7201 HAMILTON BOULEVARD
ALLENTOWN, PA 181951501

EXAMINER

SALVATORE, LYNDIA

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/621,769	BOYLAN, JOHN RICHARD	
	Examiner	Art Unit	
	Lynda M. Salvatore	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment and accompanying remarks filed 1/30/06 have been fully considered and entered. Applicant's remarks are found persuasive to overcome the obviousness rejection set forth in section 6 of the last Office Action. Specifically, Applicant has evidenced that the polymers of Swarup et al., would not have the claimed glass transition temperature range and are resistant to both water absorption and water vapor transmission. As such, this rejection is hereby withdrawn. However, Applicant's amendments are not found patently distinguishable and the following new ground of rejection is set forth herein below.

Claim Rejections - 35 USC § 112

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 2-8 are rejected for their dependency on claim 1.

4. Claim 1 recites improper hybrid claim language beginning with the recitation of "wherein a dried coating of the blend on a substrate". Applicant's claim is directed to a blend not a coated substrate comprising the blend. For purposes of examination only the limitations directed to the blend will be considered.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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6. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being obvious over GB patent specification 876,226 in view of Mao et al., EP 0 841 351 A2.

The published GB specification teaches a resin-wax emulsion composition comprising a blend of wax emulsion and resin emulsion (title and column 2, 55-60). With regard to claims 5 and 6, the GB specification teaches a wax polymer ratio of about 30 weight percent wax emulsion and 70 weight percent resin emulsion (page 5, examples VI-IX). With regard to claim 8, the GB specification teaches a wax blend comprising paraffin and polyethylene wax (page 5, example II). When coated on paper, the composition exhibits excellent waterproofing, block resistance, and grease-proofing properties (column 2, 70-75). Said coating composition is suitable to coat fibrous substrates such as paper, paperboard and textiles (column 1, 10-15).

The published GB document fails to teach the claimed polymer emulsion, however, the published EP document to Mao et al., teach an adhesive composition comprising the claimed polymer emulsion in the claimed amounts having the claimed glass transition temperature range (abstract, page 3, 54-60, page 4, 5-15). The adhesive composition exhibits properties such as the ability to form an excellent bond, balance of peel, cohesive strength, enhanced thermal and hydrolytic stability (page 3, 29-42). Said adhesive is used to fabricate paper labels and laminating polymeric films (page 2, 1-10).

With specific regard to claim 4, the combination of prior art does not specifically teach the claimed hydrostatic head of the wax-polymer emulsion blend; however, it is reasonable to presume that the claimed properties are inherent to the invention provided by the cited combination of prior art. Support for said presumption is found in the use of like materials such

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as the claimed wax emulsion and polymer emulsion constituents. Applicant is invited to evidence otherwise.

Therefore, motivated by the desire to provide a coating composition with excellent bond, peel, cohesive strength and stability, it would have been obvious to one having ordinary skill in the art at the time the invention was made to formulate the wax-resin emulsion coating composition taught in the published GB specification with the specific polymer emulsion composition disclosed in the EP document to Mao et al.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. WO 94/14891

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M. Salvatore whose telephone number is 571-272-1482. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

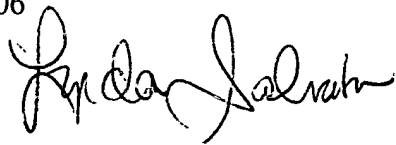
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April 13, 2006

ls

A handwritten signature in cursive script, appearing to read "Linda Salazar". The signature is written in black ink and is positioned to the right of the date and the initials "ls".